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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/634,235 | 08/05/2003 | Peter Bernhardt | 1-24671 | 6403 |

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MACMILLAN SOBANSKI & TODD, LLC
ONE MARITIME PLAZA FOURTH FLOOR
720 WATER STREET
TOLEDO, OH 43604-1619

EXAMINER

GARCIA, ERNESTO

ART UNIT PAPER NUMBER

3679

DATE MAILED: 01/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/634,235

Applicant(s)

BERNHARDT, PETER

Examiner

Ernesto Garcia

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-15 and 17-19 is/are pending in the application.
- 4a) Of the above claim(s) 17-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 8, 2005 has been entered.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Amendment

Applicant should note that the amendment filed November 8, 2005 fails to comply with 37 CFR 1.121 and 37 CFR 1.126. Specifically, no "claim 16" is present and therefore "claims 17-19" have been improperly numbered. These claims have been renumbered to be --claims 16-18-- in accordance with 37 CFR 1.126. Further, applicant failed to include a status modifier for "claim 17" (sic, claim 16 as renumbered). This is a newly presented claim and therefore the examiner has provided the proper status

modifier (i.e., --(New)--) to this claim. The above noted corrections have been sent for scanning into the electronic file. Applicant is reminded that any further claim additions must be numbered starting at "claim 19".

Restriction

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 6-15, drawn to a ball joint, classified in class 403, subclass 134.
- II. Claims 16-18, drawn to a method for producing a vehicle component and a ball joint assembly, classified in class 403, subclass 76.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of assembly. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the method of making the assembly can be performed by placing a head of a bolt opposite the vehicle component and placing the threaded shank of the bolt into a threaded hole in the ball stud.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Newly submitted claims 16-18 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the originally presented claims were only directed to a ball joint.

DPS Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 16-¹⁸~~19~~ are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Drawings

The drawings were received on 11/08/2005. These drawings are acceptable. However, the drawings contain deficiencies.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "20" and "26" have both been used to designate the

same contact surface in Figure 1. Reference character "20" should be shown as in Figure 2.

The drawings are objected to because the lead lines of reference characters 22 (Fig. 1), 30, and 20 (Fig. 2) does not completely extend to the location the references characters represent. See scanned drawings in the PAIR system.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended". If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 9, 11, 13, and 15 are objected to because of the following informalities:
regarding claims 9 and 13, "for" in line 2 should be --of--; and,
regarding claims 11 and 15, "it" in line 2 needs to be defined. Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 10 and 14, the metes and bounds of these claims is unclear. Since independent claims 6 and 12 are directed to the subcombination, i.e., the ball joint, it is unclear how the vehicle component further modifies the ball joint. Accordingly, is the combination or subcombination being claimed? Appropriate correction, clarification, or both is required. Further, the claims cannot ignore the limitation "said first axial dimension of said sealing surface of said sealing bellows is greater than said

second axial dimension of said holding surface of said ball stud” in claim 6, lines 6-9, and in claim 12, lines 8-10, when the sealing surface is compressed by the vehicle component, because the limitation is required.

Claim Rejections - 35 USC § 102

Claims 6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Epp et al., 5,882,137 (see marked-up attachment).

Regarding claim 6, Epp et al. disclose, in Figure 2, a ball joint including a housing 4, a ball stud 1, and a sealing bellows 5. The sealing bellows 5 lies against the housing 4 and the ball stud 1. The ball stud 1 has a holding surface A5 against which a sealing surface A6 of the sealing bellows 5 lies. The sealing surface A6 defines a first axial dimension A7. The holding surface A5 defines a second axial dimension A8. The first axial dimension A7 is greater than the second axial dimension A8.

Regarding claim 8, the sealing bellows 5 is provided with a metal ring A9 urging the sealing surface A6 against the holding surface A5.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epp et al., 5,882,137 (see marked-up attachment), as applied to claims 6 and 8, in view of German patent, DE1575708 or Dorr et al., 5,876,149.

Regarding claim 7, Epp et al., as discussed, fail to disclose the holding surface **A4** and the sealing surface **A5** being cylindrical. Applicant should note that the courts have consistently held that a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Further, since there is no criticality for making the holding surface and the sealing surface cylindrical it would have been obvious to choose any mating surface configuration. In any case, the German patent, in Figure 2, or Dorr et al., in Figure 1, provides evidence that a holding surface and the sealing surface are known to be cylindrical. Accordingly, it would have been obvious to make the holding surface and the sealing surface in Epp et al. cylindrical instead of conical as both configuration have been equally known to provide a sealing interface.

Regarding claim 12, Epp et al. disclose, in Figure 2, a ball joint including a housing **4**, a ball stud **1**, and a sealing bellows **5**. The sealing bellows **5** lies against the housing **4** and the ball stud **1**. The ball stud **1** has a holding surface **A5** against which a sealing surface **A6** of the sealing bellows **5** lies. The sealing bellows **5** is provided with

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a metal ring **A9** urging the sealing surface **A6** against the holding surface **A5**. The sealing surface **A6** defines a first axial dimension **A7**. The holding surface **A5** defines a second axial dimension **A8**. The first axial dimension **A7** is greater than the second axial dimension **A8**. However, Epp et al. fail to disclose the holding surface **A4** and the sealing surface **A5** being cylindrical. Applicant should note that the courts have consistently held that a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Further, since there is no criticality for making the holding surface and the sealing surface cylindrical, it would have been obvious to choose any mating surface configuration. In any case, the German patent, in Figure 2, or Dorr et al., in Figure 1, provides evidence that a holding surface and the sealing surface are known to be cylindrical. Accordingly, it would have been obvious to make the holding surface and the sealing surface in Epp et al. cylindrical instead of conical as both configuration have been equally known to provide a sealing interface.

Claims 9-11, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epp et al., 5,882,137 (see marked-up attachment), in view of German patent, DE1575708, or Dorr et al., 5,876,149, as applied to claims 7 and 12, and further in view of Buhl et al., 5,312,200.

Regarding claims 9 and 13, Epp et al. as modified above, fail to disclose, the ball joint further including a vehicle component mounted to the ball joint; and a contact

surface of the vehicle component is provided so as to adjoin the holding surface on a side of the holding surface facing away from the housing. Buhl et al. teach, in Figure 3, a ball joint further including a vehicle component 6 mounted to the ball joint; and a contact surface of the vehicle component 6 (the top surface of the component 6) so as to adjoin a holding surface on a side of the holding surface facing away from the housing to mount the vehicle component to the ball joint as a practical application to assemble a suspension. Therefore, as taught by Buhl et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a vehicle component mounted to the ball joint as part of a practical application to assemble a suspension. Applicant should note that the German patent provides further evidence to teach a vehicle component mounted to a ball joint.

Regarding claims 10 and 14, Epp et al., fail to disclose the ball joint further including a vehicle component mounted to the ball joint; and the ball joint including a shoulder and the ball stud being mounted to the vehicle component. The German patent teaches, in Figure 2, a ball joint further including a vehicle component 1 mounted to the ball joint as part of an application to form a wheel suspension. Further, the German patent teaches the ball joint including a shoulder 19 to prevent one end of a sealing bellows to move towards a ball of the a ball pivot. Therefore, as taught by the German patent, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a vehicle component mounted to the ball joint as part of an application to form a wheel suspension. Further, as taught by the German patent,

it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a shoulder to the ball joint to prevent one end of a sealing bellows from moving towards the ball of the ball pivot. Applicant should note that, given these modifications, the sealing surface will be compressed in an axial direction between the shoulder and the vehicle component. Further, applicant should note that Buhl et al. is good evidence to indicate that a vehicle component 6 is mounted to a ball joint (Fig. 3).

Regarding claims 11 and 15, Epp et al. disclose that the sealing bellows 5 is dimensioned such that the sealing bellows 5 cannot slip off from the holding surface when the ball joint is not mounted to a vehicle component. However, Epp et al. fail to disclose a vehicle component mounted to the ball joint. The German patent teaches, in Figure 2, a vehicle component mounted to a ball joint as part of an application to form a wheel suspension. Therefore, as taught by the German patent, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a vehicle component mounted to the ball joint as part of an application to make a wheel suspension. Applicant should note that Buhl et al. provides further evidence that a vehicle component 6 can be mounted to a ball joint (Fig. 3).

Response to Arguments

Applicant's arguments with respect to claims 6-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 571-272-7083. The examiner can normally be reached from 9:30-5:30. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached at 571-272-7087.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

E.G.

E.G.

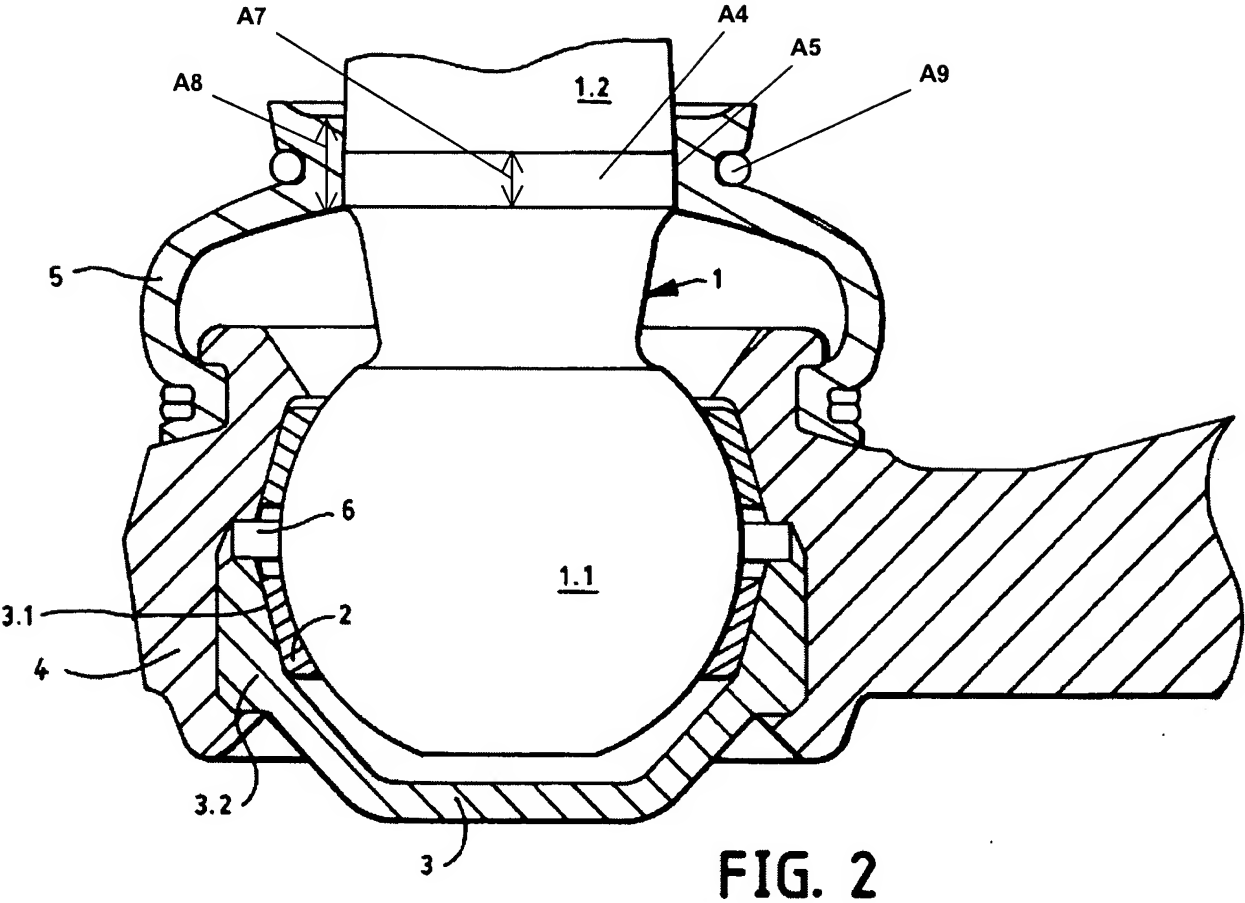
January 22, 2006

Attachment : one marked-up page of Epp et al., 5,882,13



DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

Epp et al., 5,882,137





Name of Inventor: Peter Semak
Name & Telephone Number of Person to Call If
Necessary:
Douglas V. Pavelko: (419) 255-5900
Serial No. Sheet 1 of 1 Docket No. 1-24671

REPLACEMENT SHEET

1/1

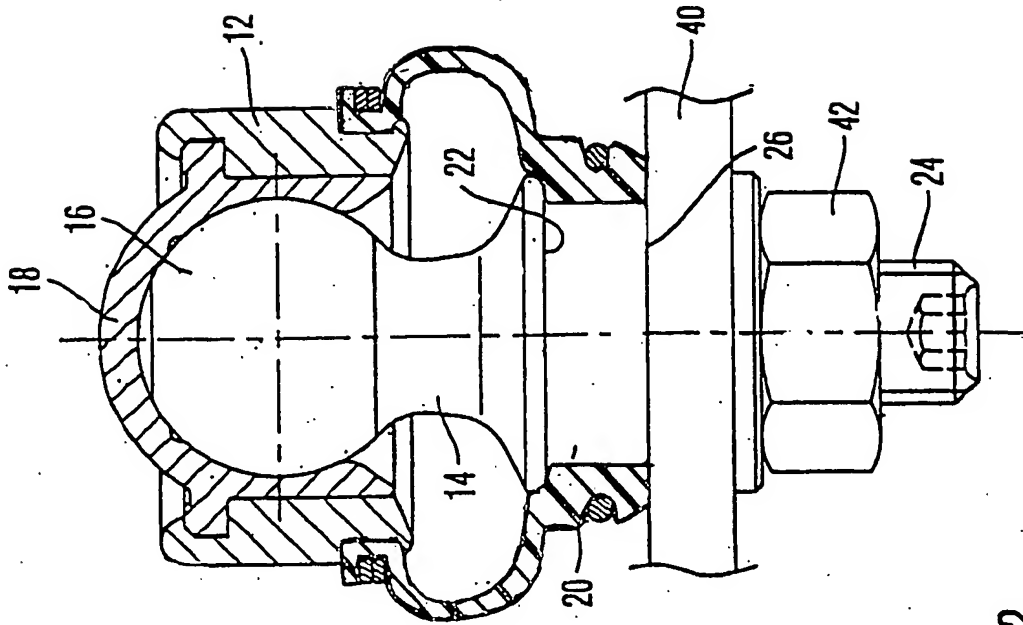


Fig. 2

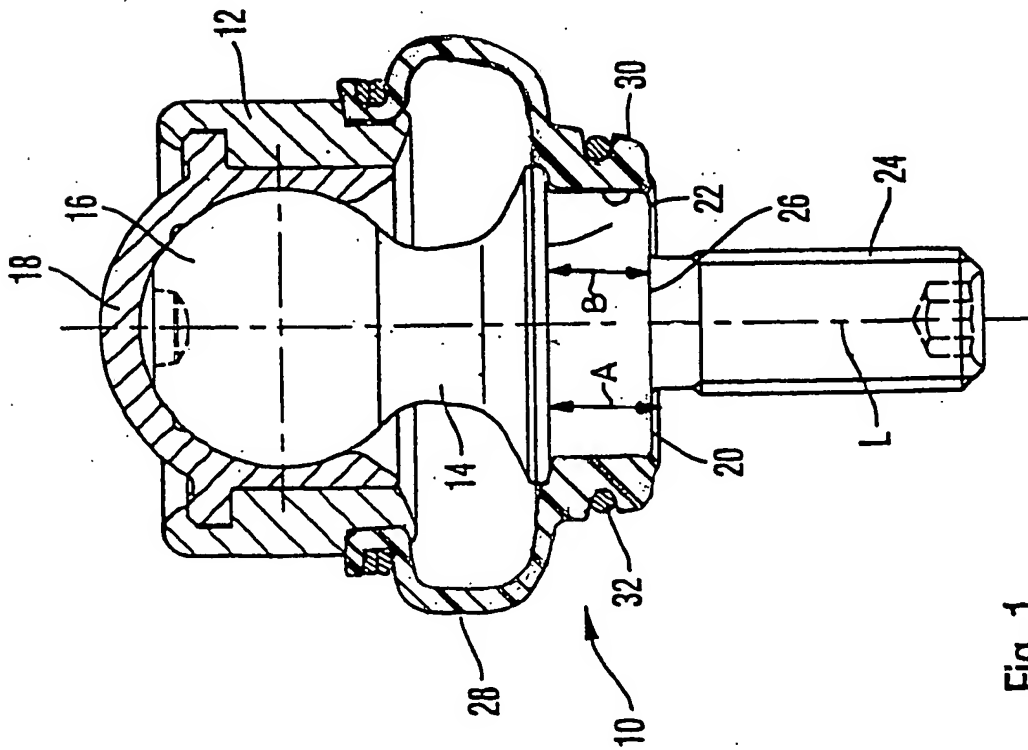


Fig. 1

Accepted
P.L. 1/19/06